

# Cardiovascular Health Risk Behaviors Among Children and Adolescents

## Tobacco Use and Secondhand Smoke Exposure

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# Overview

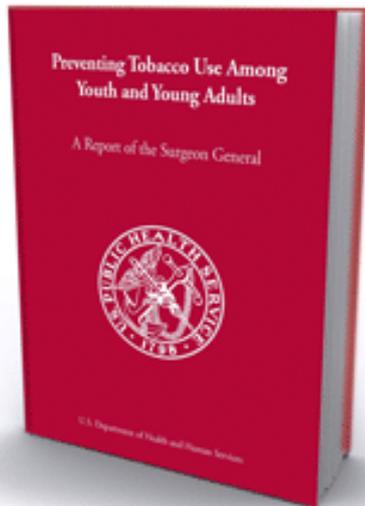
- I. Introduction to Tobacco Control
- II. Youth Tobacco Use
- III. Youth Secondhand Smoke Exposure
- IV. Summary & Conclusions



## **Introduction to Tobacco Control**

# Health Effects of Tobacco Use on Youth

*The evidence is sufficient to conclude that there is a causal relationship between.....*



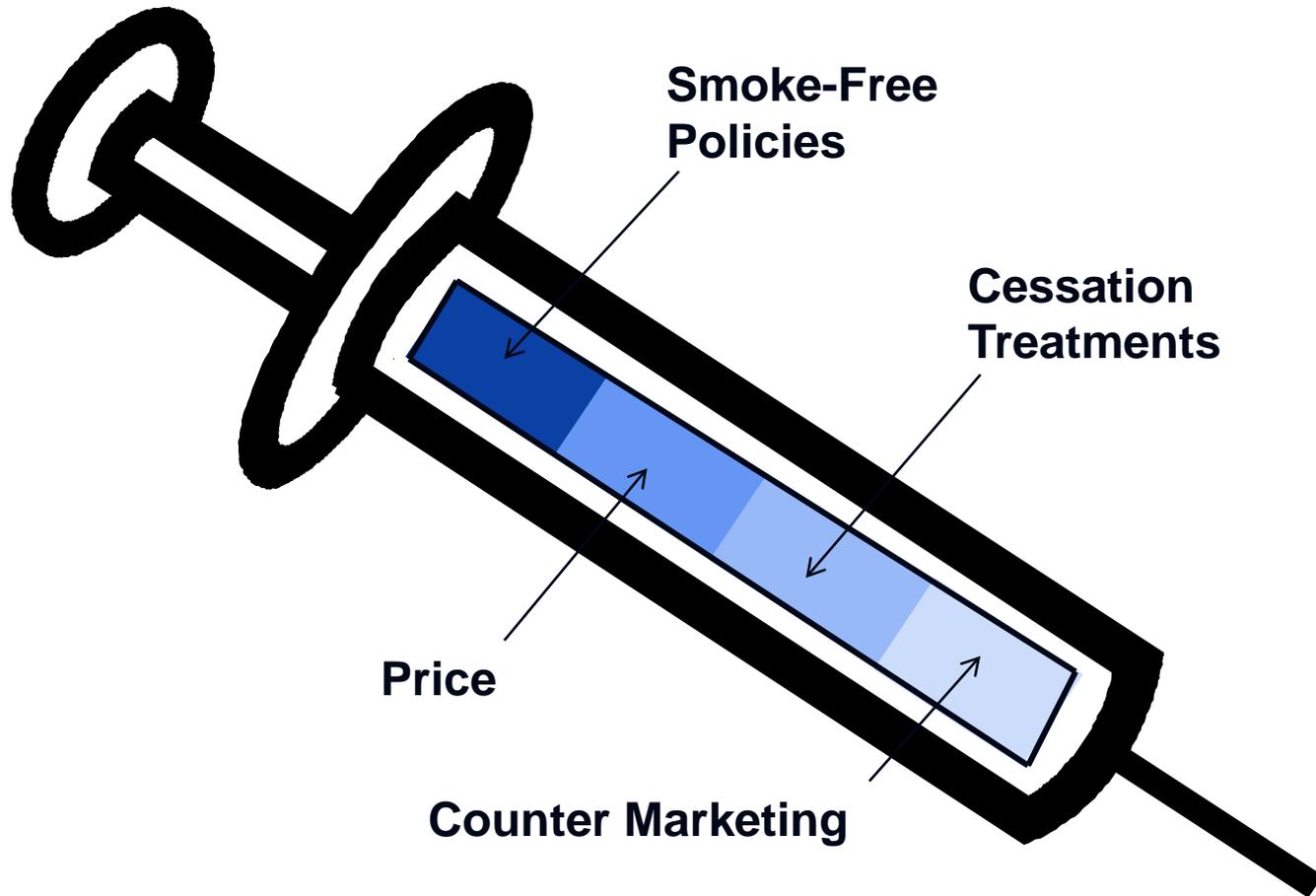
**smoking and addiction to nicotine, beginning in adolescence and young adulthood.**

**active smoking and both reduced lung function and impaired lung growth during childhood and adolescence.**

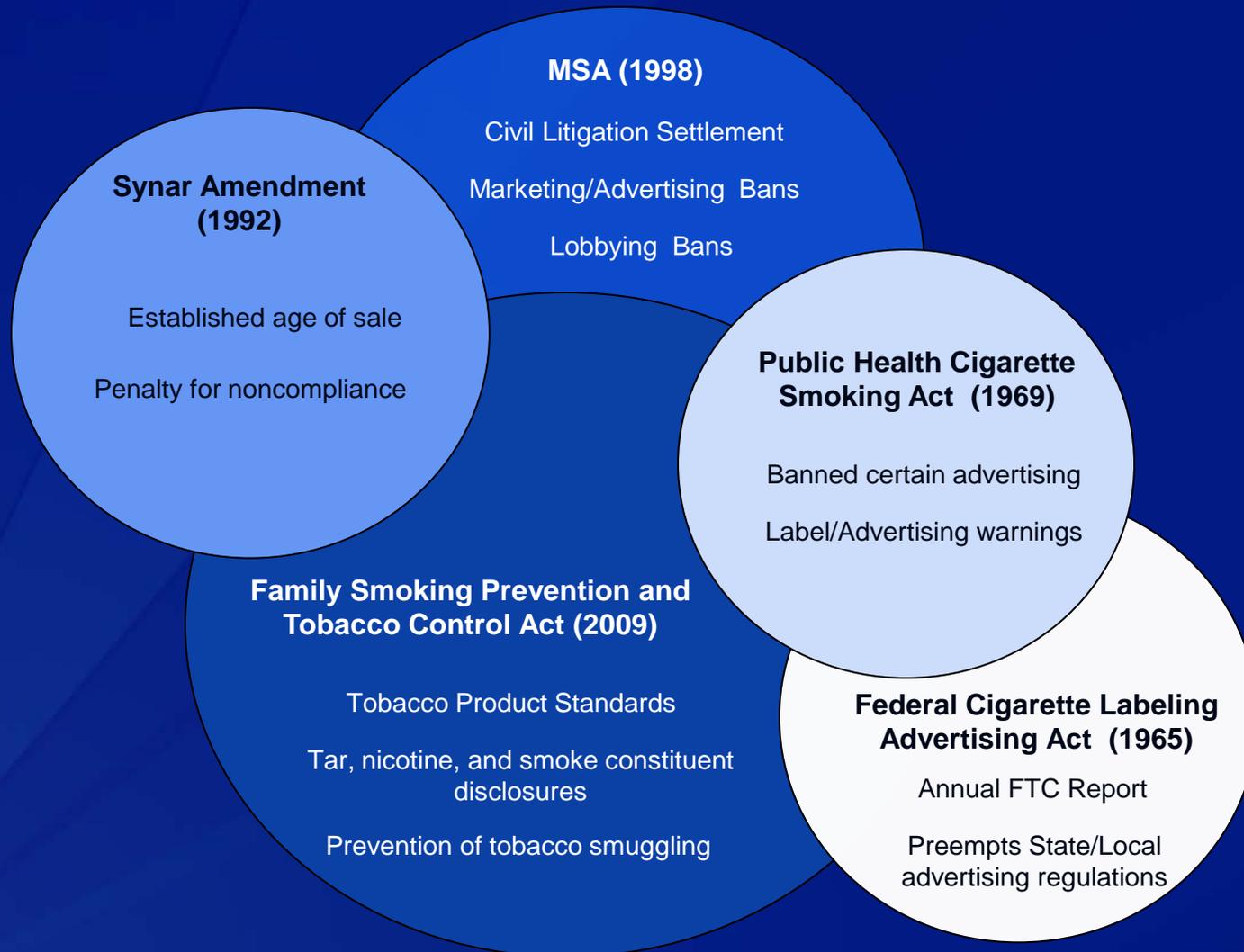
**active smoking and wheezing severe enough to be diagnosed as asthma in child and adolescent populations.**

**smoking in adolescence and young adulthood and early abdominal aortic atherosclerosis in young adults.**

# Components of “Smoking Vaccine”



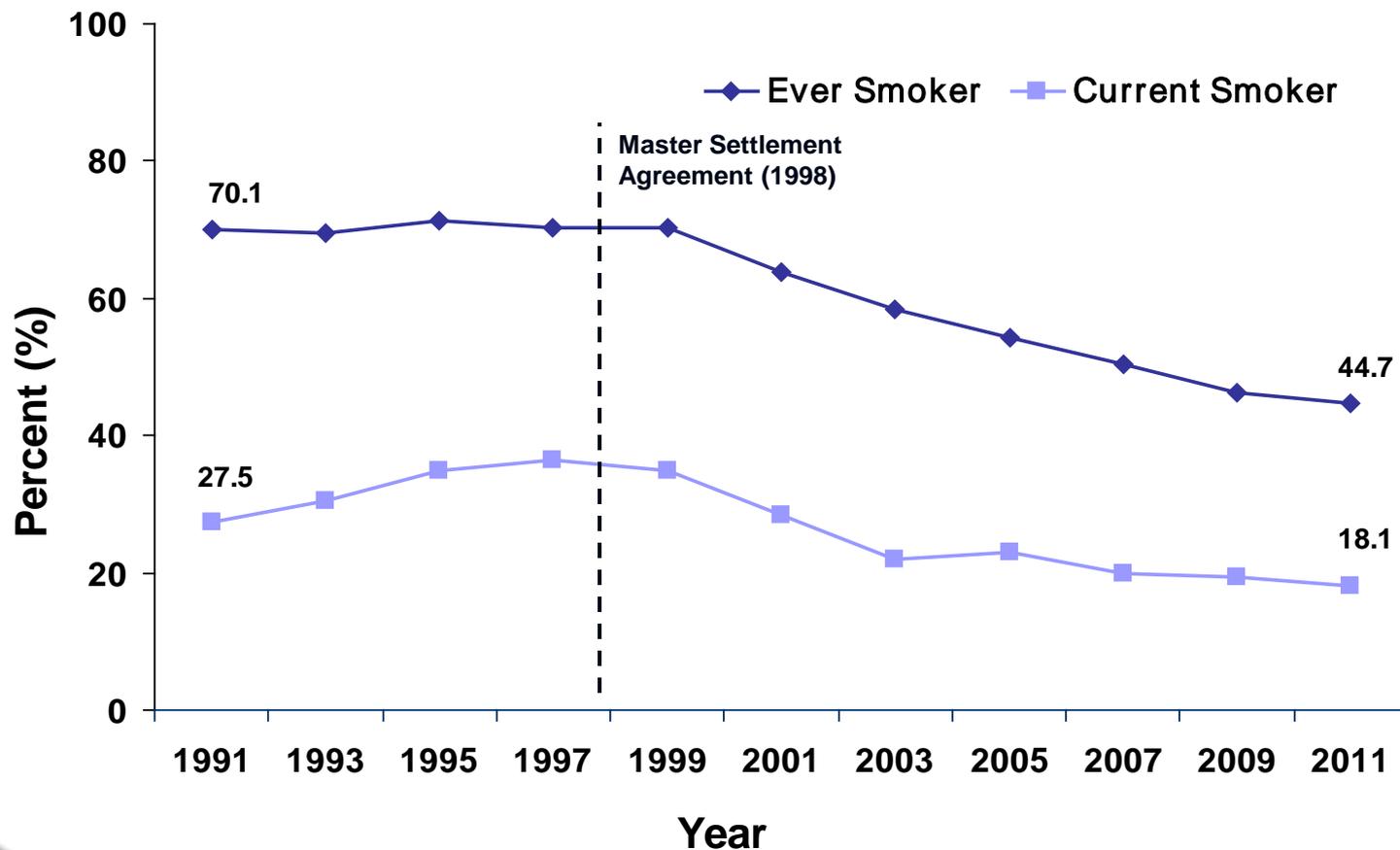
# History of National Tobacco Control Legislation





## Youth Tobacco Use

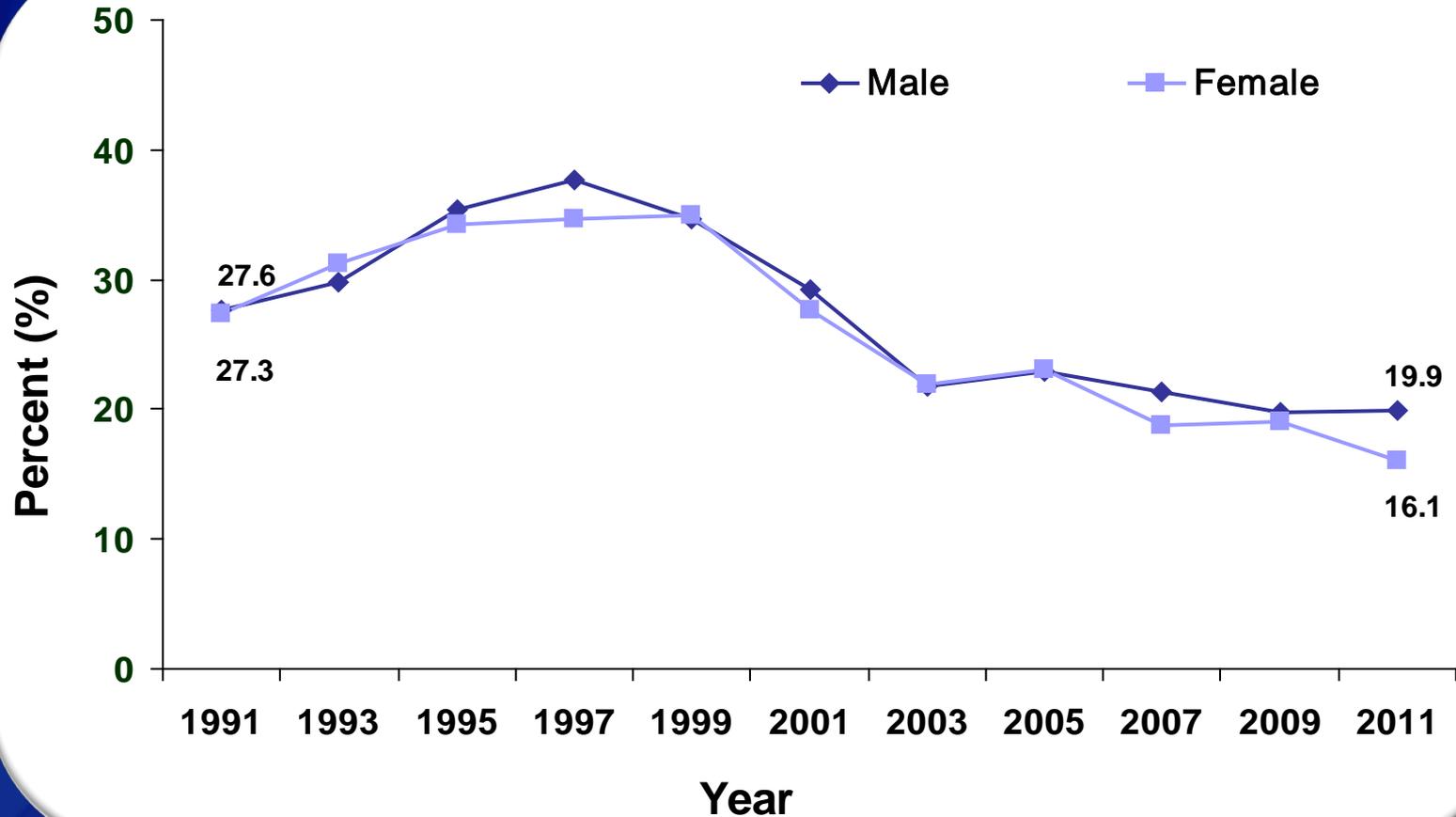
# Cigarette Use Among High School Students – United States, 1991-2011



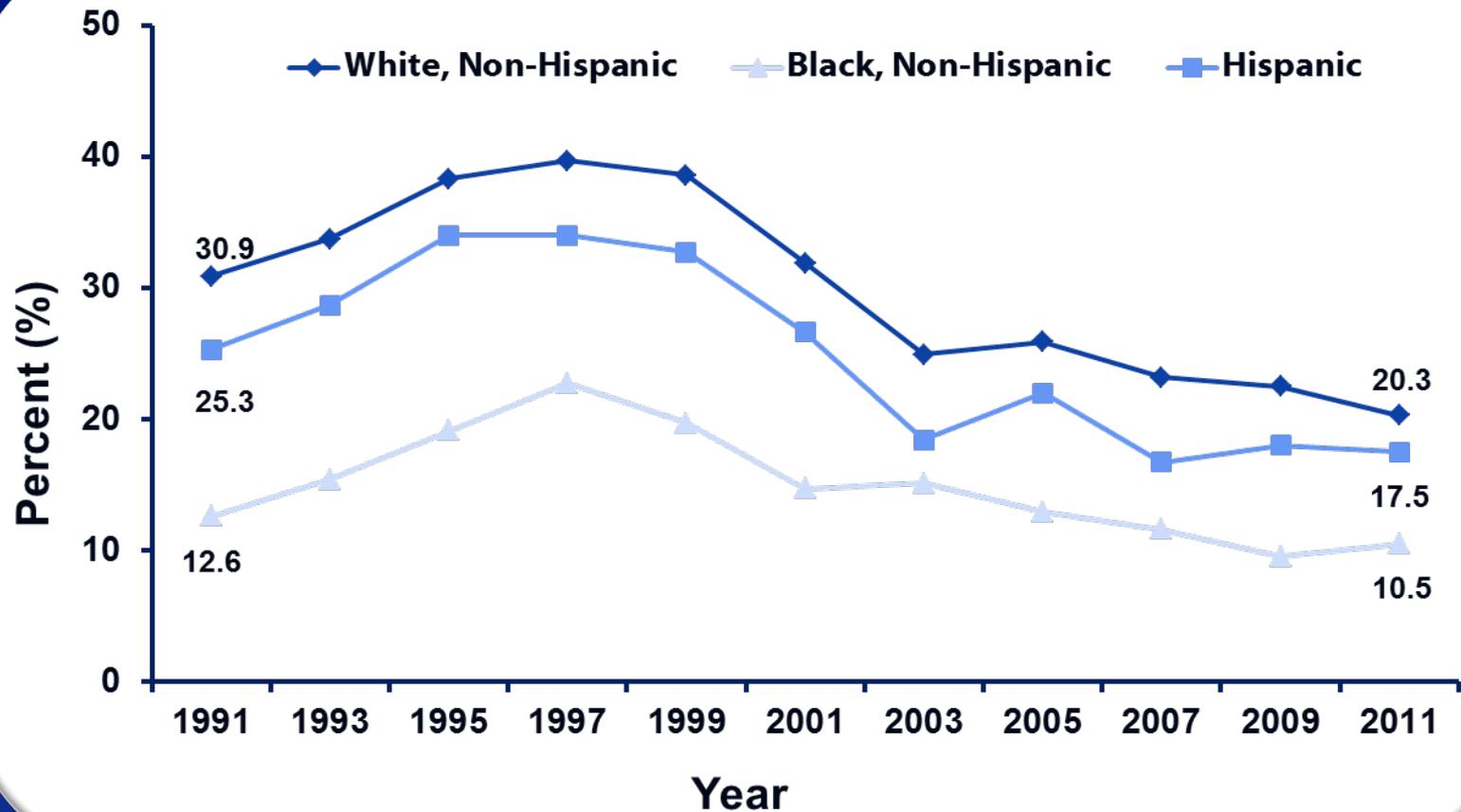
**Ever Smoker** = Ever tried cigarette smoking, even one or two puffs

**Current Smoker** = Smoked a cigarette on at least 1 day within the past 30 days

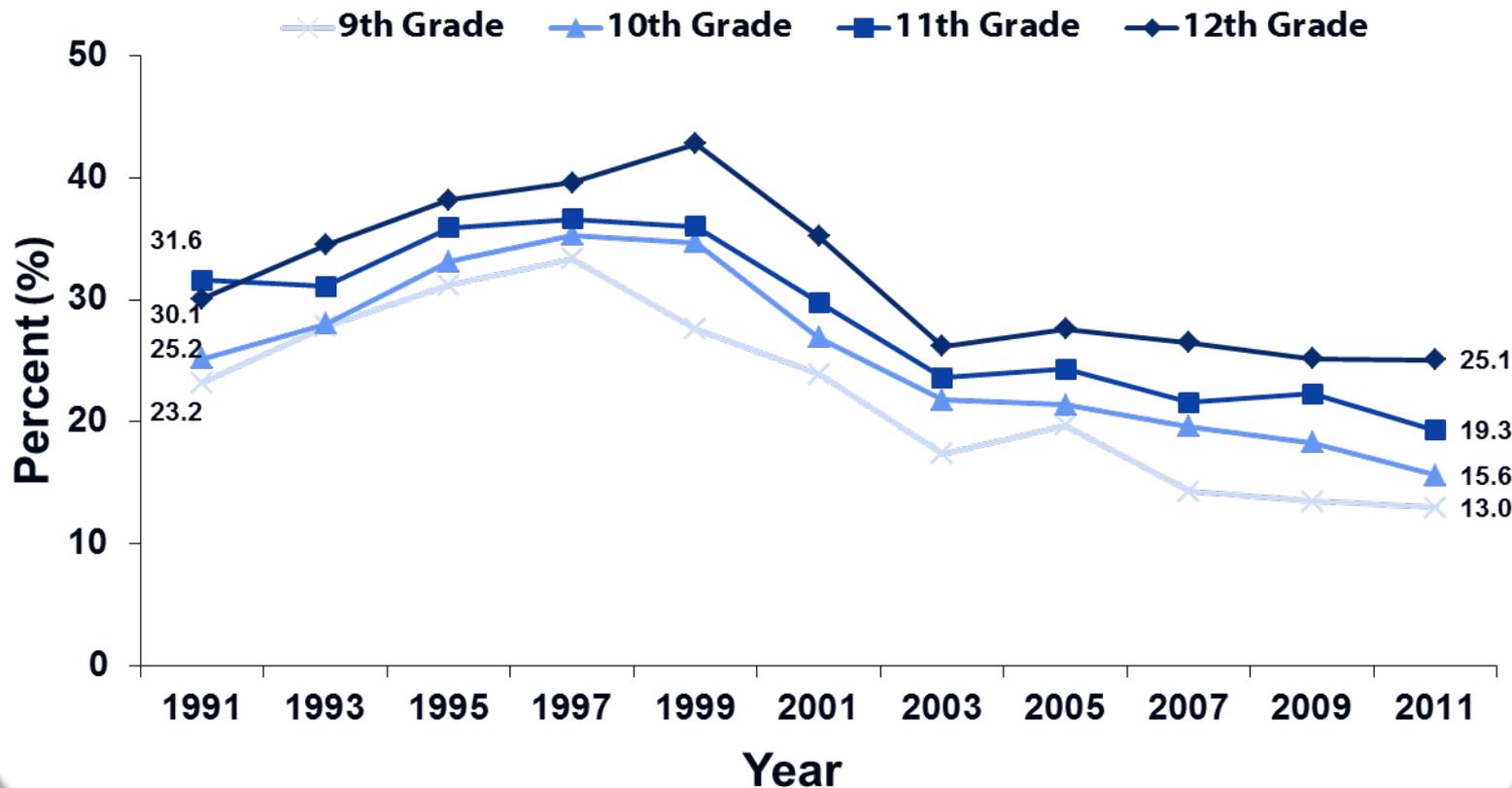
# Current Cigarette Use Among High School Students, By Sex -- United States, 1991-2011



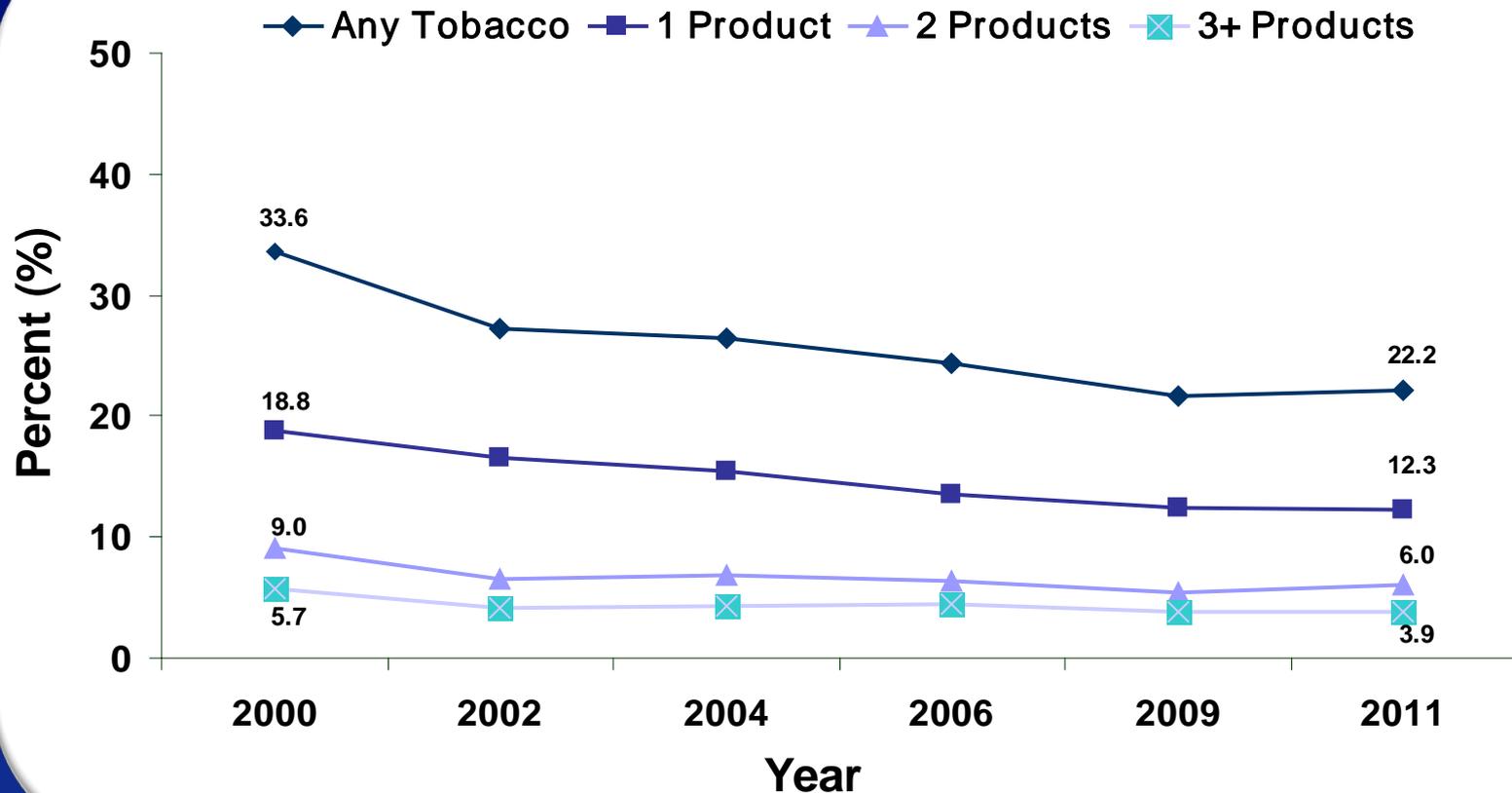
# Current Cigarette Use Among High School Students, By Race/Ethnicity -- United States, 1991-2011



# Current Cigarette Use Among High School Students, By Grade -- United States, 1991-2011



# Current Tobacco Use Among High School Students -- United States, 2000-2011

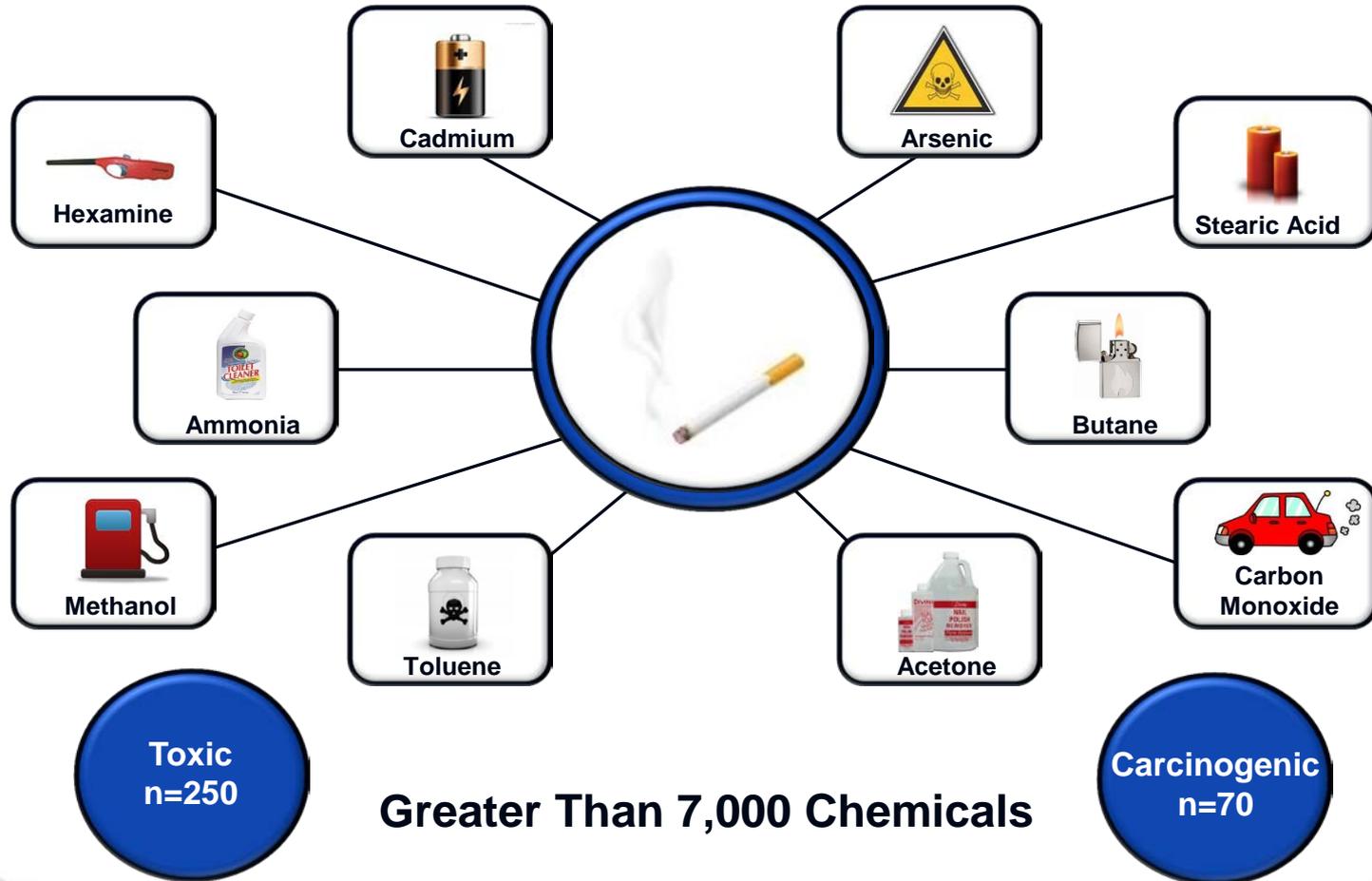


Tobacco Product = Cigarettes, Cigars, Smokeless Tobacco, Pipes, Bidis, Kreteks.



**Youth  
Secondhand Smoke  
Exposure**

# Secondhand Smoke (SHS)



# Health Effects Associated with SHS Exposure

## Adults

Lung Cancer

Coronary Heart Disease

Nasal Irritation



## Children

Prevalent Asthma

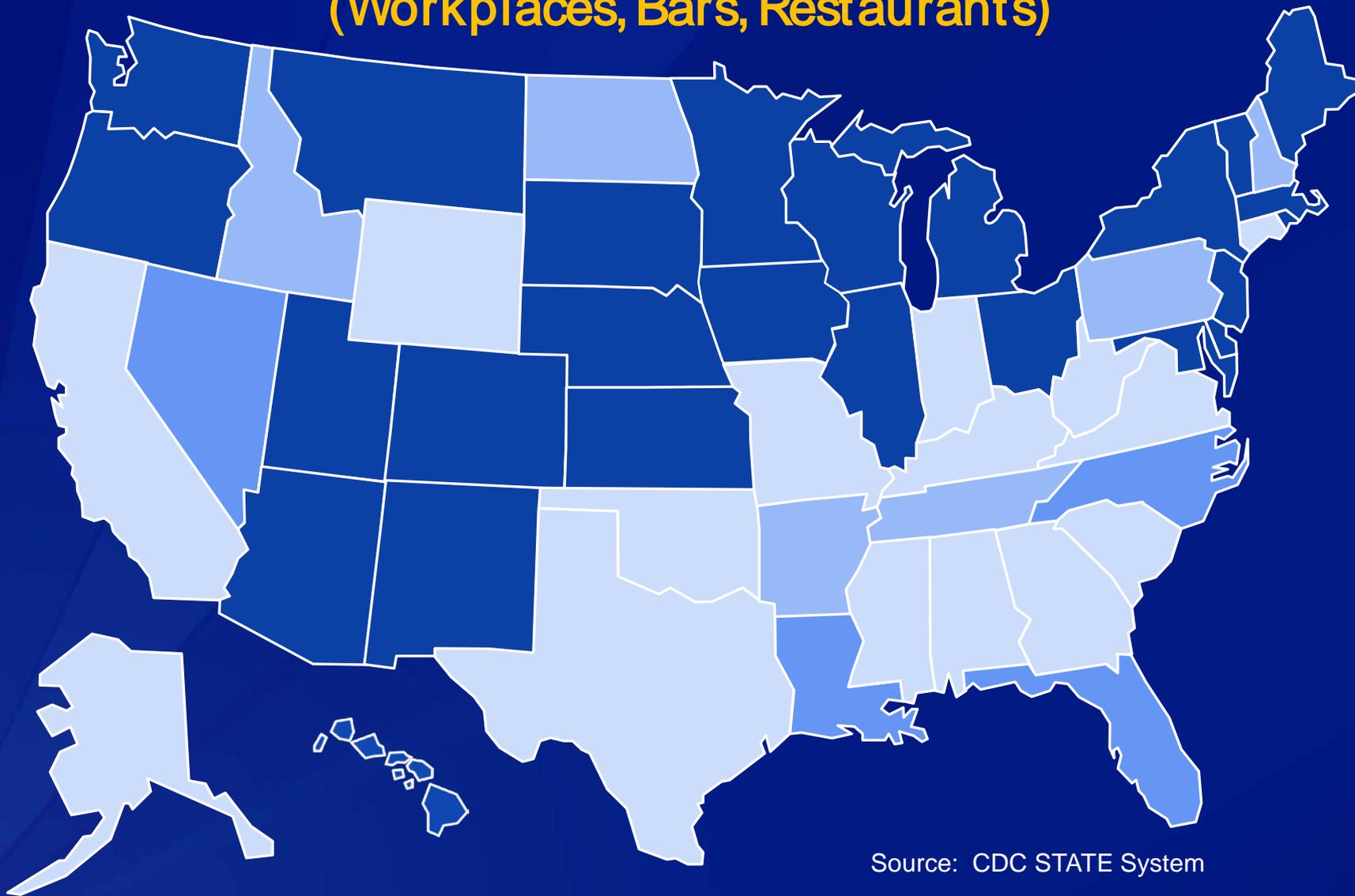
Middle Ear Disease

Lower Respiratory Illnesses

Decreased Lung Function

Sudden Infant Death Syndrome

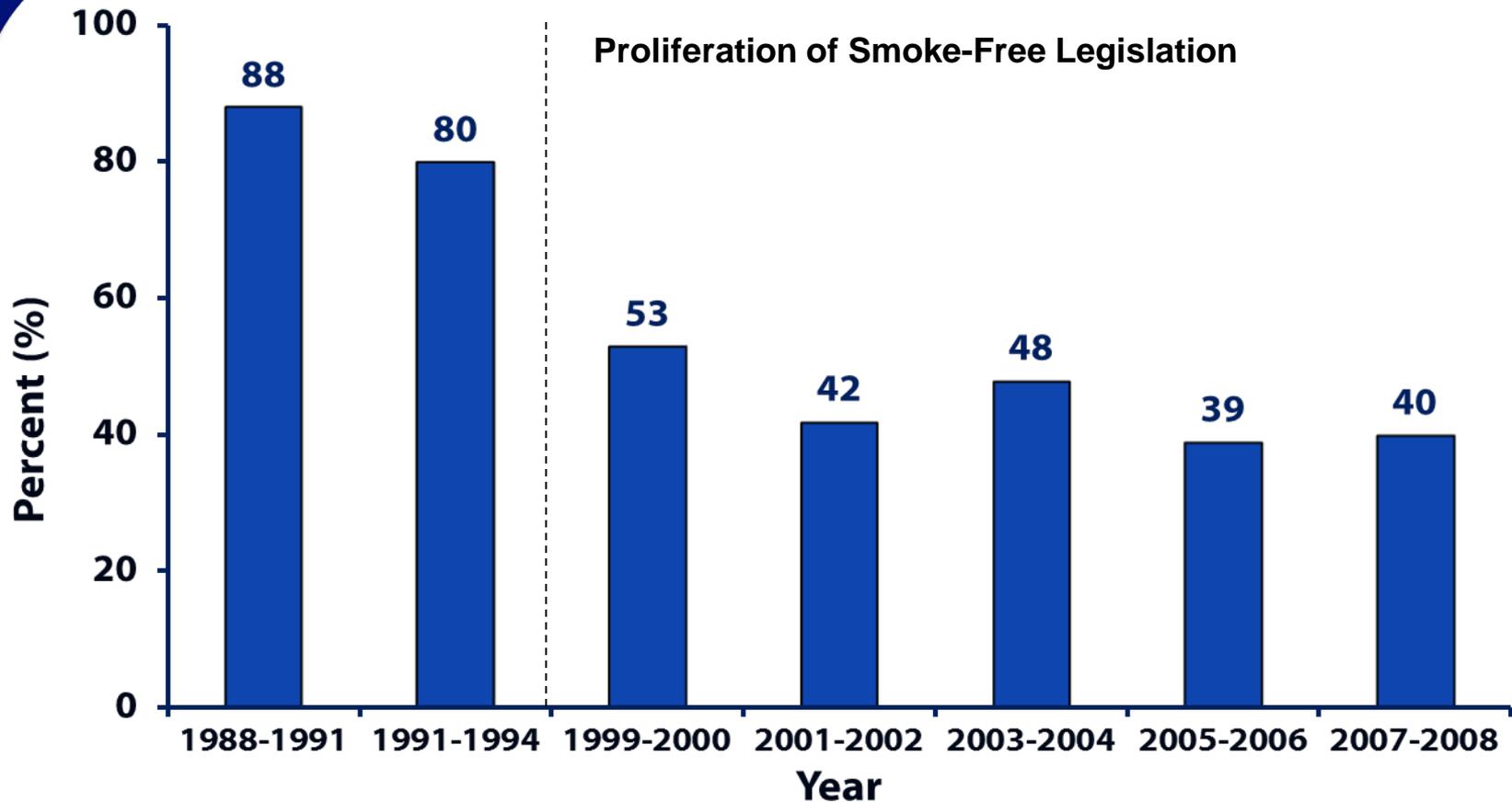
# Smoke-Free Laws — United States, August 2012 (Workplaces, Bars, Restaurants)



Source: CDC STATE System

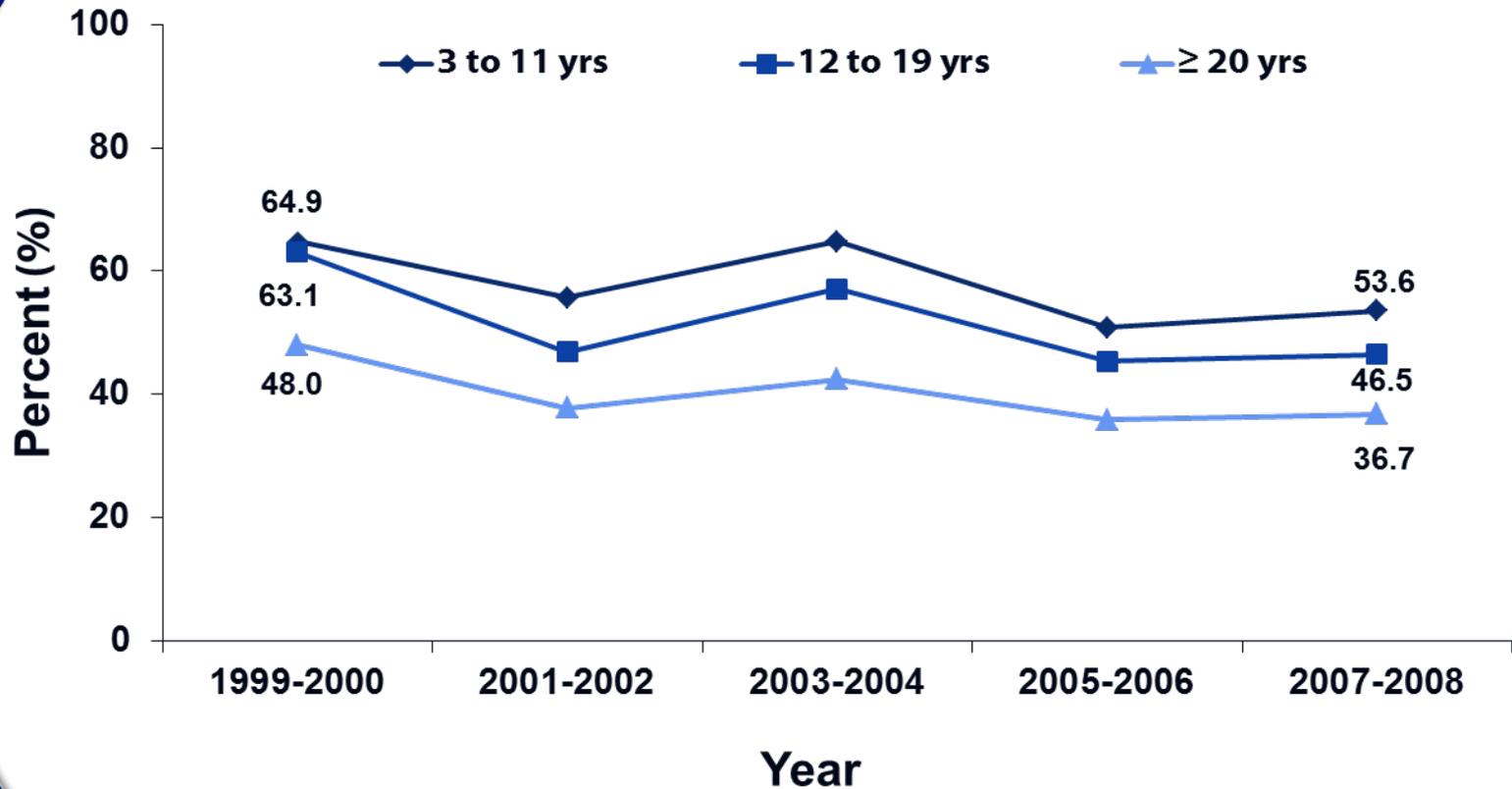


# Percent of Non-Smoking U.S. Population Exposed\* to Secondhand Smoke — NHANES, 1988-2008



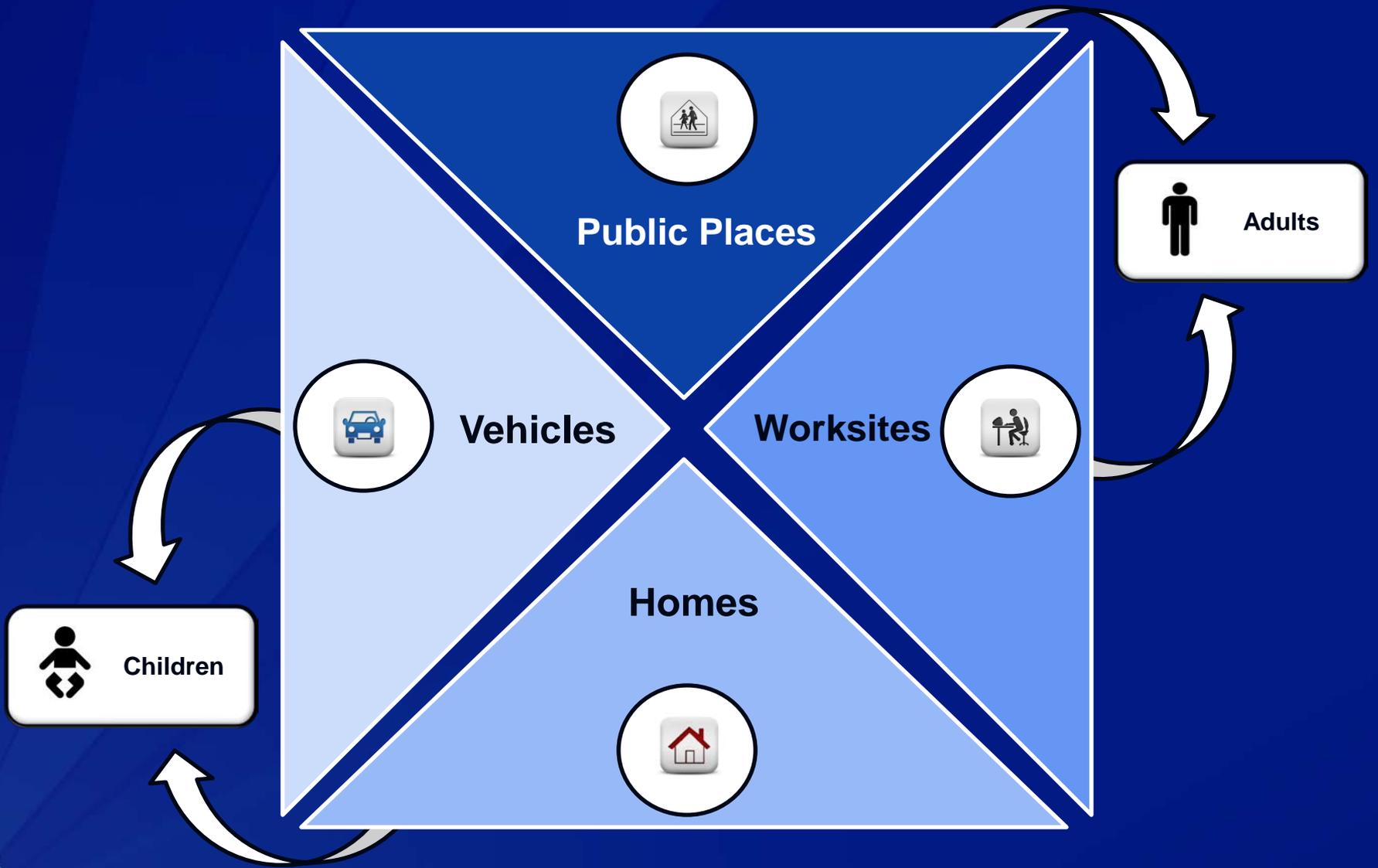
\* serum cotinine  $\geq 0.05$  ng/ml

# Percent of Non-Smoking U.S. Population Exposed\* to Secondhand Smoke, by Age — NHANES, 1999-2008



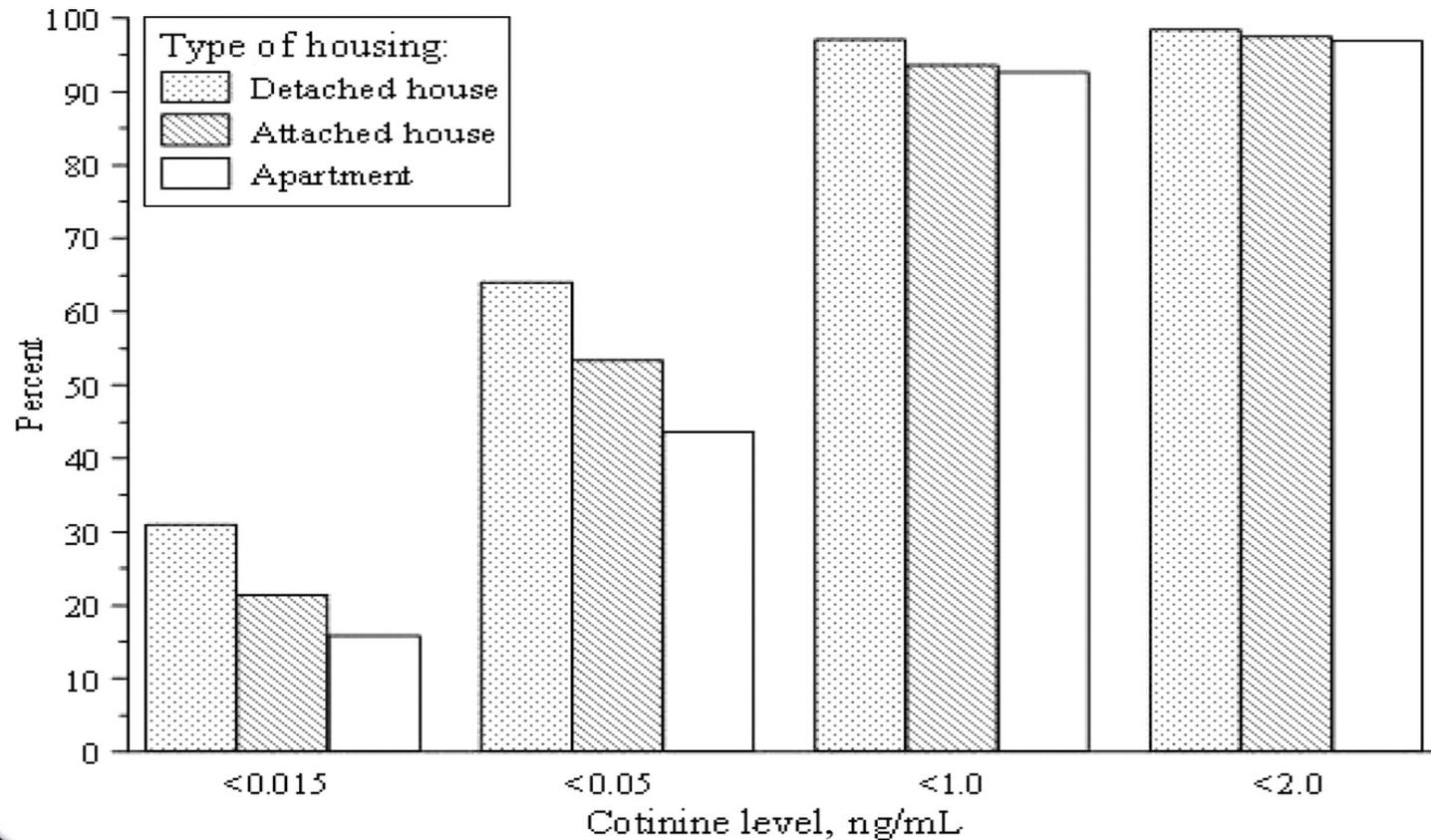
\* serum cotinine  $\geq 0.05$  ng/ml

# Primary Sources of Secondhand Smoke Exposure



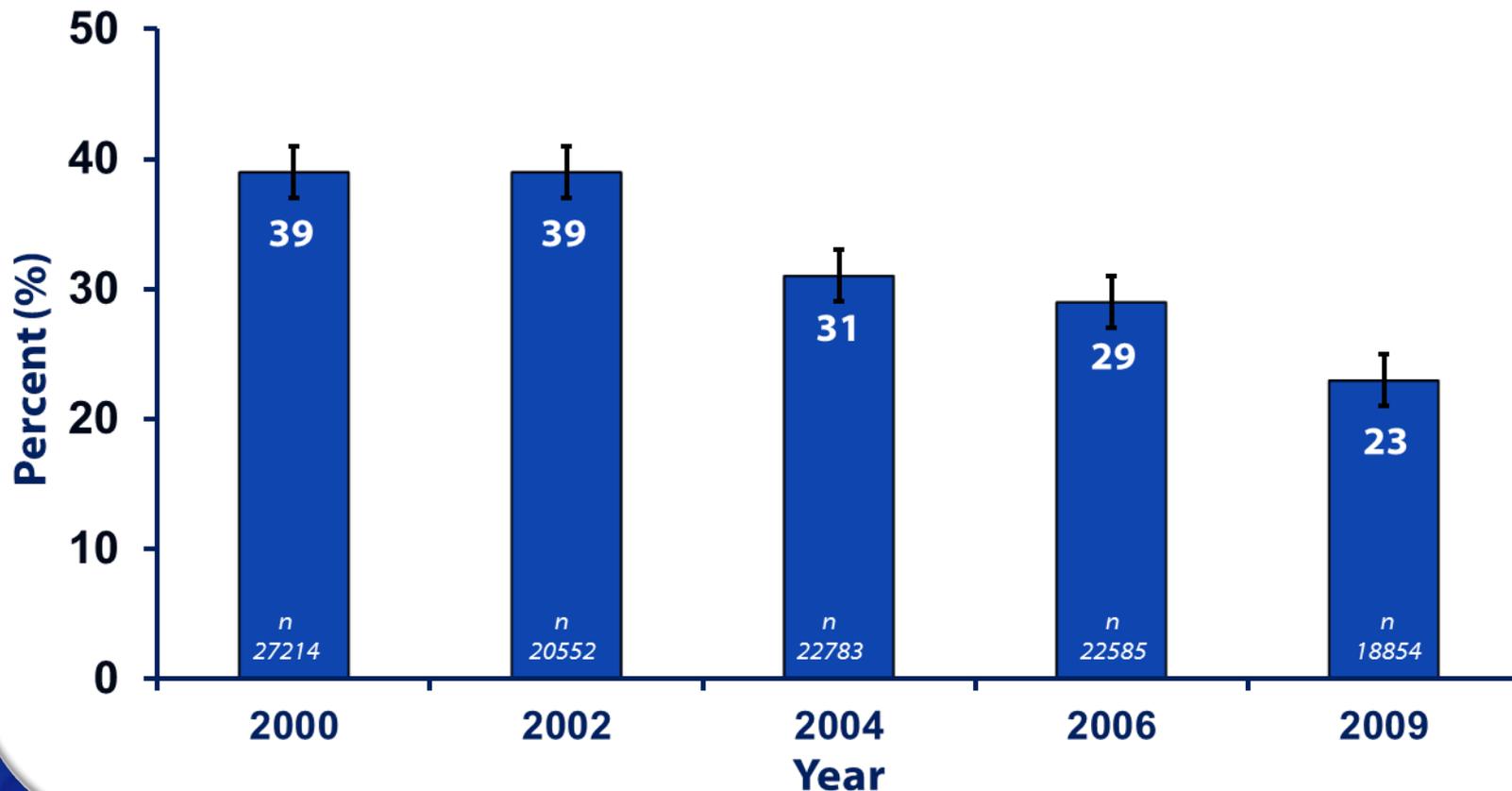
# Secondhand Smoke in Multiunit Housing

Figure. Percentage of children who are unexposed, by housing type and cotinine cutoff.



## Secondhand Smoke in Motor Vehicles

Figure. Percent of Nonsmoking Middle and High School Students Who Rode in a Car With Someone Who was Smoking Within the Past 7 Days -- NYTS, 2000-2009.



Source: King BA, Dube SR, Tynan MA. Secondhand smoke exposure in cars among middle and high school students --- United States, 2000-2009. *Pediatrics*. 2012;129(3):446-52.



## Summary & Conclusions

# Summary & Conclusions

- **Tobacco use by youth and young adults has immediate adverse health consequences, including addiction, and accelerates the development of chronic diseases.**
  - **Secondhand smoke causes premature death and disease in children who do not smoke.**
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- **After years of steady progress, declines in the use of tobacco by youth and young adults have slowed for cigarette smoking and stalled for smokeless tobacco use.**
  - **Millions of children are still exposed to secondhand smoke despite substantial progress in tobacco control.**
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- **Coordinated, multicomponent interventions that combine mass media campaigns, price increases, school-based policies and programs, and state or local comprehensive smoke-free policies are effective in reducing the initiation, prevalence, and intensity of smoking among youth and young adults.**

# Contact

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[www.cdc.gov/tobacco](http://www.cdc.gov/tobacco)



For more information please contact Centers for Disease Control and Prevention

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.